

What is claimed is:

1. An aqueous basecoat coating composition, comprising:
 - (a) a dispersed polyurethane polymer, said polyurethane polymer having a glass transition temperature of about 0°C or less;
 - (b) a dispersed acrylic polymer, said acrylic polymer having a glass transition temperature that is at least about 20°C higher than the glass transition temperature of said polyurethane polymer;
 - (c) a crosslinking component that is reactive with at least one of the polyurethane polymer and the acrylic polymer; and
 - (d) a pigment,

wherein the nonvolatile weight of the polyurethane polymer is from about 10% to about 50% by weight of the combined nonvolatile weights of the polyurethane polymer, the acrylic polymer and the crosslinking component, and

further wherein the basecoat composition has a pigment to binder ratio of at least about 0.5.

2. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer has a glass transition temperature of about -20°C or less.

3. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer has a glass transition temperature of about -80°C to about 0°C.

4. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer has a weight average molecular weight from about 15,000 to about 60,000.
5. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer is prepared by reaction of at least one polyisocyanate selected from the group consisting of methylene-bis-4,4'-isocyanatocyclohexane, 1,6-hexamethylene diisocyanate, 1,12-dodecamethylene diisocyanate, and combinations thereof.
6. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer is prepared by reaction of at least one α,ω -alkylene diisocyanate having four or more carbons.
7. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer is prepared by reaction of at least one polyester polyol.
8. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer is prepared by reaction of a polyester diol that is the reaction product of a mixture comprising neopentyl glycol and adipic acid.

9. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer is anionic.

10. An aqueous basecoat coating composition according to claim 1, wherein the nonvolatile weight of the acrylic polymer is from about 25% to about 75% by weight of the combined nonvolatile weights of the polyurethane polymer, the acrylic polymer and the crosslinking component.

11. An aqueous basecoat coating composition according to claim 1, wherein the acrylic polymer has an active hydrogen functionality equivalent weight of 1000 or less.

12. An aqueous basecoat coating composition according to claim 1, wherein the acrylic polymer is anionic.

13. An aqueous basecoat coating composition according to claim 1, wherein the acrylic polymer has an acid number from about 1 to about 10 mg KOH/g.

14. An aqueous basecoat coating composition according to claim 1, further comprising a member selected from the group consisting of 2-amino-2-methylpropanol and dimethylethanolamine.

15. An aqueous basecoat coating composition according to claim 1, wherein the acrylic polymer is polymerized using a chain transfer agent.
16. An aqueous basecoat coating composition according to claim 1, wherein the acrylic polymer has a glass transition temperature from about -30°C to about 80°C .
17. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer is at least about 40% by weight of the combined nonvolatile weights of the polyurethane polymer and the acrylic polymer.
18. An aqueous basecoat coating composition according to claim 1, wherein the polyurethane polymer is from about 50% to about 75% by weight of the combined nonvolatile weights of the polyurethane polymer and the acrylic polymer.
19. An aqueous basecoat coating composition according to claim 1, wherein the crosslinker component is from about 15% to about 25% by weight of the combined nonvolatile weights of the polyurethane polymer, the acrylic polymer and the crosslinking component.
20. An aqueous basecoat coating composition according to claim 1, wherein the basecoat comprises a flake pigment.

21. An aqueous basecoat coating composition according to claim 1, wherein the basecoat has a volatile organic content of less than about 0.7 pounds per gallon.
22. A composite coating, comprising a basecoat layer and a clearcoat layer over the basecoat layer, wherein the basecoat layer is obtained by applying a layer of an aqueous basecoat coating composition according to claim 1.
23. A composite coating according to claim 22, wherein the basecoat layer is applied over a primer layer that is obtained by applying and curing an aqueous primer composition comprising:
- (a) a dispersed polyurethane polymer, said polyurethane polymer having a glass transition temperature of about 0°C or less;
 - (b) a dispersed acrylic polymer, said acrylic polymer having a glass transition temperature that is at least about 20°C higher than the glass transition temperature of said polyurethane polymer; and
 - (c) a crosslinking component that is reactive with at least one of the polyurethane polymer and the acrylic polymer.
24. A composite coating according to claim 23, wherein the polyurethane polymer of the primer composition has a glass transition temperature from about -80°C to about 0°C.

25. A composite coating according to claim 23, wherein the polyurethane polymer of the primer composition has a weight average molecular weight from about 15,000 to about 60,000.
26. A composite coating according to claim 23, wherein the acrylic polymer of the primer composition has a glass transition temperature from about -30°C to about 80°C .
27. A composite coating according to claim 23, wherein the polyurethane polymer of the primer composition is from about 50% to about 75% by weight of the combined nonvolatile weights of the polyurethane polymer and the acrylic polymer of the primer composition.
28. A composite coating according to claim 23, wherein the crosslinking component of the primer composition is from about 5% to about 20% by weight of the combined nonvolatile weights of the polyurethane polymer, the acrylic polymer, and the crosslinking component of the primer composition.